KAISER PERMANENTE®

Kaiser Foundation Health Plan of Washington

Clinical Review Criteria
Facet Neurotomy/SI Joint Neurotomy

- Radiofrequency Neurotomy
- Neurolytic Agent

Criteria

For Medicare Members

Source	Policy
CMS Coverage Manuals	None
National Coverage Determinations (NCD)	Induced Lesions of Nerve Tracts (160.1)
Local Coverage Determinations (LCD)	Facet Joint Interventions for Pain Management (L38803) Sacroiliac Joint Injections and procedures (L39464) *__Please Note:__ Noridian currently does not cover RFA ablation of the SIJ joint
Local Coverage Article (LCA)	Facet Joint Interventions for Pain Management (A58405) Billing and Coding: Sacroiliac Joint Injections and Procedures (A59246)

For Non-Medicare Members

Kaiser Permanente has elected to use the Facet Neurotomy, SI Joint Neurotomy (KP-0218 08012023v2) MCG* for medical necessity determinations. For access to the MCG Clinical Guidelines criteria, please see the MCG Guideline Index through the provider portal under Quick Access.

***MCG manuals are proprietary and cannot be published and/or distributed.** However, on an individual member basis, Kaiser Permanente can share a copy of the specific criteria document used to make a utilization management decision. If one of your patients is being reviewed using these criteria, you may request a copy of the criteria by calling the Kaiser Permanente Clinical Review staff at 1-800-289-1363 or access the MCG Guideline Index using the link provided above.

If requesting this service, please send the following documentation to support medical necessity:

- Last 6 months of clinical notes from requesting provider &/or specialist (Neurology, physiatrist, anesthesia, orthopedics)

The following information was used in the development of this document and is provided as background only. It is provided for historical purposes and does not necessarily reflect the most current published literature. When significant new articles are published that impact treatment option, Kaiser Permanente will review as needed. This information is not to be used as coverage criteria. Please only refer to the criteria listed above for coverage determinations.

Background

Radiofrequency (RF) neurotomy is a treatment for various conditions, including certain types of back and neck pain. It is based on the premise that severing the nerve supply to a painful structure may reduce pain and allow a restoration of function. It was first described by Shealy in 1975 and the technique has been modified since that time (Niemisto, 2003). Generally, in order to use RF neurotomy, two criteria must be fulfilled: 1) the structure responsible for the pain must be at or near the spinal facet joints and 2) the painful structure must be identified with a diagnostic block of local anesthesia causing temporary relief of pain. Due to the high false-positive rate of single local anesthetic blocks, placebo-controlled blocks are recommended, particularly for the lumbar spine (Lord and Bogduk, 2002).

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The RF neurotomy procedure consists of inserting a radiofrequency electrode percutaneously under fluoroscopy guidance to the targeted area. A small amount of electrical stimulation is initially used to identify the nerve position. A regional anesthetic is then injected. After that, RF current is applied to the tissue. RF current is low energy, high frequency alternating current. When applied to biological tissue, the current causes charged molecules to oscillate and the resulting friction produces heat. A RF lesion is made by raising the temperature of the electrode to 70-90ºC for 60-90 seconds. The size of the lesion varies with the size of the electrode; the maximum width of the lesion is 3-4 times the width of the electrode tip. Since the lesions are small, accurate placement of the electrode requires knowledge of the topography of the target nerve tissues and surgical precision (Lord and Bogduk, 2002)

Documentation should include:

- Pre-procedural documentation must include a complete initial evaluation including history and an appropriately focused musculoskeletal and neurological physical examination. There should be a summary of pertinent diagnostic tests or procedures justifying the possible presence of facet joint pain.
- A procedure note must be legible and include sufficient detail to allow reconstruction of the procedure. Required elements of the note include a description of the techniques employed, nerves injected and sites(s) of injections, drugs and doses with volumes and concentrations as well as pre and post-procedural pain assessments. With RF neurotomy, electrode position, cannula size, lesion parameters, and electrical stimulation parameters and findings must be specified and documented.
- Facet joint interventions (diagnostic and/or therapeutic) must be performed under fluoroscopic or computed tomographic (CT) guidance. Facet joint interventions performed under ultrasound guidance will not be reimbursed.
- A hard (plain radiograph with conventional film or specialized paper) or digital copy image or images which adequately document the needle position and contrast medium flow (excluding RF ablations and those cases in which using contrast is contra-indicated, such as patients with documented contrast allergies), must be retained and submitted if requested.
- In order to maintain target specificity, total IA injection volume must not exceed 1.0 mL per cervical joint or 2 mL per lumbar joint, including contrast. Larger volumes may be used only when performing a purposeful facet cyst rupture in the lumbar spine.
- Total MBB anesthetic volume shall be limited to a maximum of 0.5 mL per MB nerve for diagnostic purposes and 2ml for therapeutic. For a third occipital nerve block, up to 1.0 mL is allowed for diagnostic and 2ml for therapeutic purposes.
- In total, no more than 100 mg of triamcinolone or methylprednisolone or 15 mg of betamethasone or dexamethasone or equivalents shall be injected during any single injection session.
- Both diagnostic and therapeutic facet joint injections may be acceptably performed without steroids.

Medical Technology Assessment Committee (MTAC)

Back/Neck Pain

07/14/2004: MTAC REVIEW

Evidence Conclusion: Back Pain There is insufficient evidence to conclude that RF neurotomy improves health outcomes among patients with back pain. Two of the three RCTs on back pain that were reviewed (LeClaire; Barendse) did not find a significant benefit of RF neurotomy compared to a sham intervention in the primary analysis. Barendse may have been underpowered to detect a clinically significant difference between groups. The third study (van Kleef, 1999), which included patients with low back pain originating from the lumber zygapophysial joint, found significantly more clinical successes in the RF neurotomy group. The latter study (n=32), which included a multivariate analysis to adjust for baseline differences, had imprecise estimates with large confidence intervals and only an 8-week follow-up period. All of the studies were limited by small sample sizes. In addition, all of the studies used non-blinded diagnostic blocks and there may have been false positive findings of the location of pain. Long-term safety and efficacy of RF neurotomy for treating back pain was not evaluated.

Evidence Conclusion: Neck pain There is insufficient evidence to conclude that RF neurotomy improves health outcomes among patients with neck pain. One of the two RCTs reviewed (Lord) was well designed but had a biased presentation of study results. The authors did not report their primary outcomes, pain and impact of pain on activities of daily living, at the end of the double-blind follow-up period at 3 months. The results they did report were confounded by rescue treatment. The other RCT (van Kleef, 1996) found a significant benefit of RF neurotomy compared to sham intervention for patients with cervicobrachial pain. The study is limited by its short (8-week) follow-up period and small sample size (n=20), which can result in baseline differences between groups. Also, the van Kleef, 1996 study used non-blinded diagnostic blocks and some patients may have been falsely

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identified with cervicobrachial pain. Long-term safety and efficacy of RF neurotomy for treating neck pain was not evaluated.
Articles: The search yielded 23 articles. There was a Cochrane library review from 2003 that reviewed the randomized controlled trials on the topic but did not conduct a quantitative meta-analysis to evaluate the overall effectiveness of the treatment. Seven double-blind sham-controlled RCTs met the inclusion criteria for the Cochrane review. One additional small RCT published after the Cochrane review was identified in the Medline search, but this study was excluded because the patient population had already failed intradiscal electrothermal annuloplasty (IDET). The Cochrane investigators assigned a methodological quality score to each RCT they included. Studies that received a quality score of at least 7 out of 10 were selected for this review. The Leclaire and Barendse articles were by the same research groups but included different study populations. Back pain: There were four RCTs on the treatment of back pain. One RCT that had a low methodology score in the Cochrane review was not reviewed. The remaining three RCTs were critically appraised: Leclaire R, Fortin L, Lambert R et al. Radiofrequency facet joint denervation in the treatment of low back pain. *Spine* 2001; 26: 1411-1418. See Evidence Table van Kleef M, Barendse GAM, Kessels A et al. Randomized trial of radiofrequency lumbar facet denervation for chronic low back pain. *Spine* 1999; 24: 1937-1942. See Evidence Table Barendse GAM, van den Berg SGM, Kessels AHF et al. Randomized controlled trial of percutaneous intradiscal radiofrequency thermocoagulation for chronic discogenic back pain. *Spine* 2001; 26: 287-292. See Evidence Table Lord SM, Barnsley L, Wallis BJ et al. Percutaneous radio-frequency neurotomy for chronic cervical zygapophyseal-joint pain. *N Engl J Med* 1996; 335: 1721-1726. See Evidence Table

The use of radiofrequency neurotomy in the treatment of chronic neck and back pain does not meet the *Kaiser Permanente Medical Technology Assessment Criteria.*

07/29/2005: MTAC REVIEW
Back Pain/Neck Pain
Evidence Conclusion: A PubMed search (2004 to present) yielded 6 articles. Four were review articles and one was a study of electrode placement, not effectiveness. There was one new RCT (Stovner et al. Cephalalgia 2004; 24: 821). The study was not worth critically appraising because it only included 12 patients. It did not find a significant benefit of radiofrequency neurotomy vs. sham treatment for next pain, but they almost certainly did not have sufficient statistical power.

This review was not taken to the Medical Technology Assessment Committee. The information was not sufficient to warrant a review by the committee.

Hayes Technology Assessment

Conventional Radiofrequency Ablation for Sacroiliac Joint Denervation for Chronic Low Back Pain
Technology Description
RFA is a percutaneous outpatient procedure involving the use of radiofrequency (RF) energy to heat tissue to the point of destruction. It is intended to prevent transmission of pain signals from the sensory nerves to the central nervous system.

Conclusion
An overall low-quality body of evidence suggests that conventional (i.e., continuous, thermal) RFA for SIJ denervation is safe and may be effective for reducing the intensity of CLBP arising from the SIJ. However, substantial uncertainty exists regarding its effect on function and QOL as well as its effectiveness compared with most treatment alternatives.

Hayes Rating: C—For the use of conventional (thermal) radiofrequency ablation (RFA) for sacroiliac join (SIJ) denervation in adults with chronic low back pain (CLBP) originating from this joint who have not responded to conventional treatment.

Hayes. Hayes Technology Assessment. Conventional Radiofrequency Ablation for Sacroiliac Joint Denervation for Chronic Low Back Pain. Dallas, TX: Hayes; December 06, 2022. Retrieved October 16, 2023 from: https://evidence.hayesinc.com/report/dir.radiofrequency2116

Applicable Codes

Considered Medically Necessary when criteria in the applicable policy statements listed above are met:
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CPT® or HCPC Codes	Description
64633	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, single facet joint
64634	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional facet joint (List separately in addition to code for primary procedure)
64635	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, single facet joint
64636	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional facet joint (List separately in addition to code for primary procedure)

Medicare: Considered Not Medically Necessary
Non-Medicare: Considered Medically Necessary when the criteria in the applicable policy statements listed above are met

CPT® or HCPC Codes	Description
64625	Radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)

Medicare: Considered Not Medically Necessary
Non-Medicare: Considered Not Medically Necessary - experimental, investigational, or unproven

CPT® or HCPCS Codes	Description
0213T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; single level
0214T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; second level (List separately in addition to code for primary procedure)
0215T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; third and any additional level(s) (List separately in addition to code for primary procedure)
0216T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; single level
0217T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; second level (List separately in addition to code for primary procedure)
0218T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; third and any additional level(s) (List separately in addition to code for primary procedure)

***Note:** Codes may not be all-inclusive. Deleted codes and codes not in effect at the time of service may not be covered.

****To verify authorization requirements for a specific code by plan type, please use the **Pre-authorization Code Check**.

Date Created	Date Reviewed	Date Last Revised
07/14/2004	01/05/2010[MDCRPC], 05/04/2010[MDCRPC], 03/01/2011[MDCRPC], 01/03/2012[MDCRPC], 11/06/2012[MDCRPC] ,09/03/2013[MPC], 07/01/2014[MPC], 05/05/2015[MPC], 03/01/2016[MPC],	04/27/2023

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	01/03/2017[MPC], 11/07/2017[MPC] , 10/02/2018[MPC] , 10/01/2019[MPC], 10/06/2020[MPC], 10/05/2021[MPC],10/06/2022[MPC] , 10/03/2023[MPC]	

[MDCRPC] Medical Director Clinical Review and Policy Committee

[MPC] Medical Policy Committee

Revision History	Description
09/08/2015	Revised LCD for Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy to L35178 and L34995
12/08/2016	Deleted LCD 35178 as it was retired, and LCD 34995 replaces it
07/11/2017	MPC approved criteria for repeat facet neurotomy
04/06/2021	MPC approved to adopt changes to facet neurotomy hybrid criteria. Requires 60-day notice, effective date September 1, 2021.
04/27/2021	Removed retired LCD L34995 and LCA A57728; Added replacement LCD L33803 and LCA A58405
10/04/2022	Revised criteria to clarify Facet Neurotomy for thoracic spine is not covered.
10/12/2022	Updated LCA A58405 link. Updated applicable codes.
03/06/2023	Update applicable codes.
03/07/2023	MPC approved to adopt changes to facet neurotomy hybrid criteria. Requires 60-day notice, effective date 08/01/2023.
04/27/2023	Added SI Ablation criteria from previously approved SIJ fusion from March 2023 MPC. Added Medicare non-coverage LCD for RFA ablation of SIJ.
10/16/2023	Added Billing and Coding article A59246 link

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